



Building a Future for Technological Innovation

August 17th, 2010

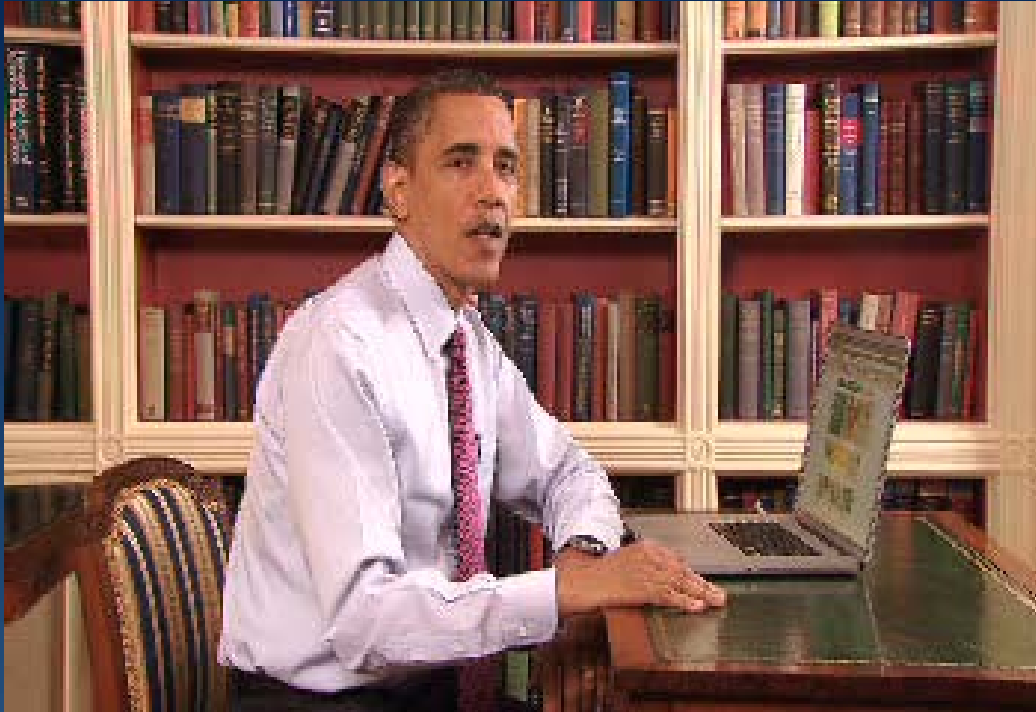
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A Presidential Commitment to Technology

Healthcare.gov a Model for Simplifying Access to Information

A screenshot of the Healthcare.gov website. The header includes the site name and navigation links. A green speech bubble highlights the text: "Simple interface to access relevant insurance information; pricing data available in version 2.0 launching in October". Below this, there's a section for "7 Options for You" with a list of insurance options. A table displays details for "Virginia Advantage" and "Individual Basic BlueCare" plans, including coverage, provider networks, and price estimates.

Plan	Services Covered & Excluded	Provider Network	Drug Coverage	More Information	Price Estimates
Virginia Advantage Anthem Health Plans of Virginia, Inc.	View Plan Benefits	Correct Link Not Provided	No Link Provided	1-800-304-0372 Visit Website	Price estimates available Oct. 2010 (TODD: details_link)
Individual Basic BlueCare	View Plan	Correct Link Not	No Link	1-800-304-0372	Price estimates available Oct. 2010 (TODD: details_link)

“My Administration is committed to creating an unprecedented level of openness in Government...and establish a system of transparency, public participation, and collaboration.”

—President Barack Obama, Jan 21st, 2009



A Focus on Strengthening Global Competitiveness

Harnessing Technology, Data, Innovation for Growth, Empowerment

Innovation Trend

Rank	Country	Change Score (1999–2009)
1	China	19.5
2	Singapore	19.0
3	Lithuania	14.9
4	Estonia	14.8
5	Denmark	14.7
6	Luxembourg	14.6
7	Slovenia	16.7

**2010 UN Index
rankings jumped
from fourth (in
2008) to second**

▶ 40 U.S. 2.7

E-Government

Rank	Country	Percent Change (2005–2008)
1	China	21%
2	Spain	20%
3	France	16%
4	Russia	15%
5	EU-10	14%
6	S. Korea	13%
7	Japan	12%

▶ 22 U.S. -7%

**American
Graduation
Initiative calls for
return to #1 by 2020**

Higher Education

Rank	Country	Percent Change (1999–2005)
1	Poland	117%
2	S. Korea	46%
3	Ireland	41%
4	Australia	31%
5	UK	30%
6	EU-25	27%
7	France	26%

▶ 15 U.S. 3%



President's Strategy for American Innovation

Tech Role in Innovation for Sustainable Growth and Quality Jobs

Open Government Initiative focused on empowering everyday Americans

Catalyze Breakthroughs for National Priorities

- Unleash a clean energy revolution
- Support advanced vehicle technology
- Drive breakthroughs in health IT
- Address scientific "grand challenges"

Smart Grid and Health IT Apps innovation efforts underway

Promote Competitive Markets that Spur Productive Entrepreneurship

- Promote American exports
- Support open capital markets that allocate resources to the most promising ideas
- Encourage high-growth and innovation-based entrepreneurship
- Improve public sector innovation and support community innovation

Cloud Computing and Mobility as platforms for growth

Invest in the Building Blocks of American Innovation

- Restore American leadership in fundamental research
- Educate the next generation with 21st century knowledge and skills; create a world-class workforce
- Build a leading physical infrastructure
- Develop an advanced information technology ecosystem



“From Compliance to Innovation”

Delivering Platforms for Educational Innovation Every 90 Days



STEM education a critical priority across portfolio

Visit 49 highest-rated finalists; consider, by September 8th, to offer help on match

“To meet the President’s goals -- to reach the finish line -- we need transformational change. The islands of excellence that now exist in school districts have to become the norm...In a word, America’s schools need innovation.”

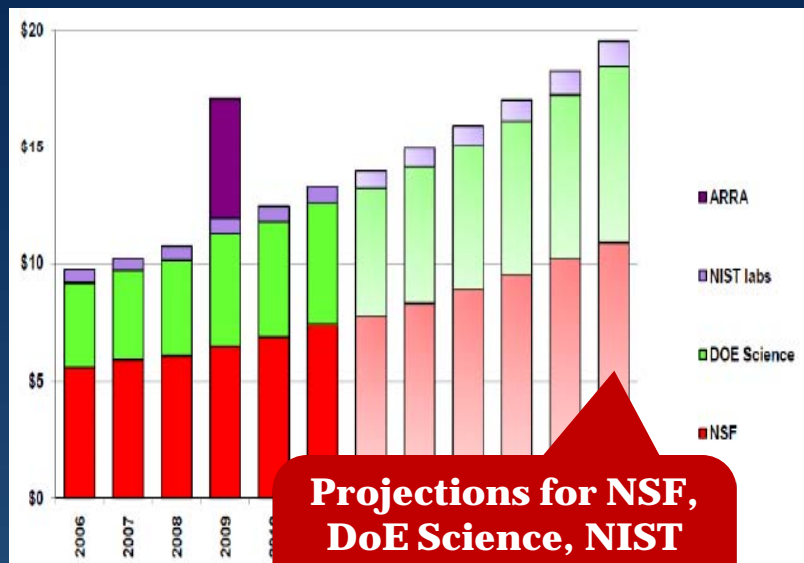
- Secretary Arne Duncan, Aug 20, 2009



Investments in R&D Spur Jobs of the Future

PITAC Inaugural Meeting on Innovations in the “Golden Triangle”

“Doubling” R&D Commitment



Projections for NSF, DoE Science, NIST labs as noted in FY11 budget

PITAC Public Hearing

President's Council of Advisors on Science and Technology
Executive Office of the President

Golden Triangle Workshop

President's Council of Advisors on Science and Technology (PITAC)
President's Innovation Communities (PICs)
Golden Triangle Workshop

Tuesday, June 22, 2010
10:00am - 2:30pm

[CLICK HERE TO VIEW THE PUBLIC COMMENT PAGE](#)

SUBMIT A PUBLIC COMMENT

Email Facebook

“What are the critical infrastructures that only government can help provide that are needed to enable creation of new bio, nano, and IT products and innovations that will lead to new jobs and greater GDP?”

“...support R&D in advanced manufacturing to strengthen U.S. leadership in the areas of robotics, cyber-physical systems, and flexible manufacturing.”

—OMB-OSTP FY 12 Budget Memo, 7/21/10



Unleashing a Mobile Broadband Revolution

Presidential Commitment to (Nearly) Double Available Spectrum

Spectrum Initiative in Brief

- #1: Identify and plan for the release of 500 MHz of spectrum
- #2: Provide new tools and new incentives to free up spectrum
- #3: Redeploy the spectrum to high-value uses
- #4: Use the auction proceeds to promote public safety and job-creating infrastructure investment

Commerce Dept report due by 10/10 on timetable for freeing up spectrum for exclusive or shared use; CTO focus on advanced sharing technologies



She's one smart mom
She's got **text4baby**

Text BABY to 511411
Get **FREE** messages on your cell phone to help you through your pregnancy and your baby's first year

4baby
baby.org

Innovations: Text4baby partnership serves 60,000+ moms since 02/10 launch



“Beta Block” R&D Initiative to Connect Neighbors

Internally Funded Effort to Deliver 1 Gbs to Poorest Homes

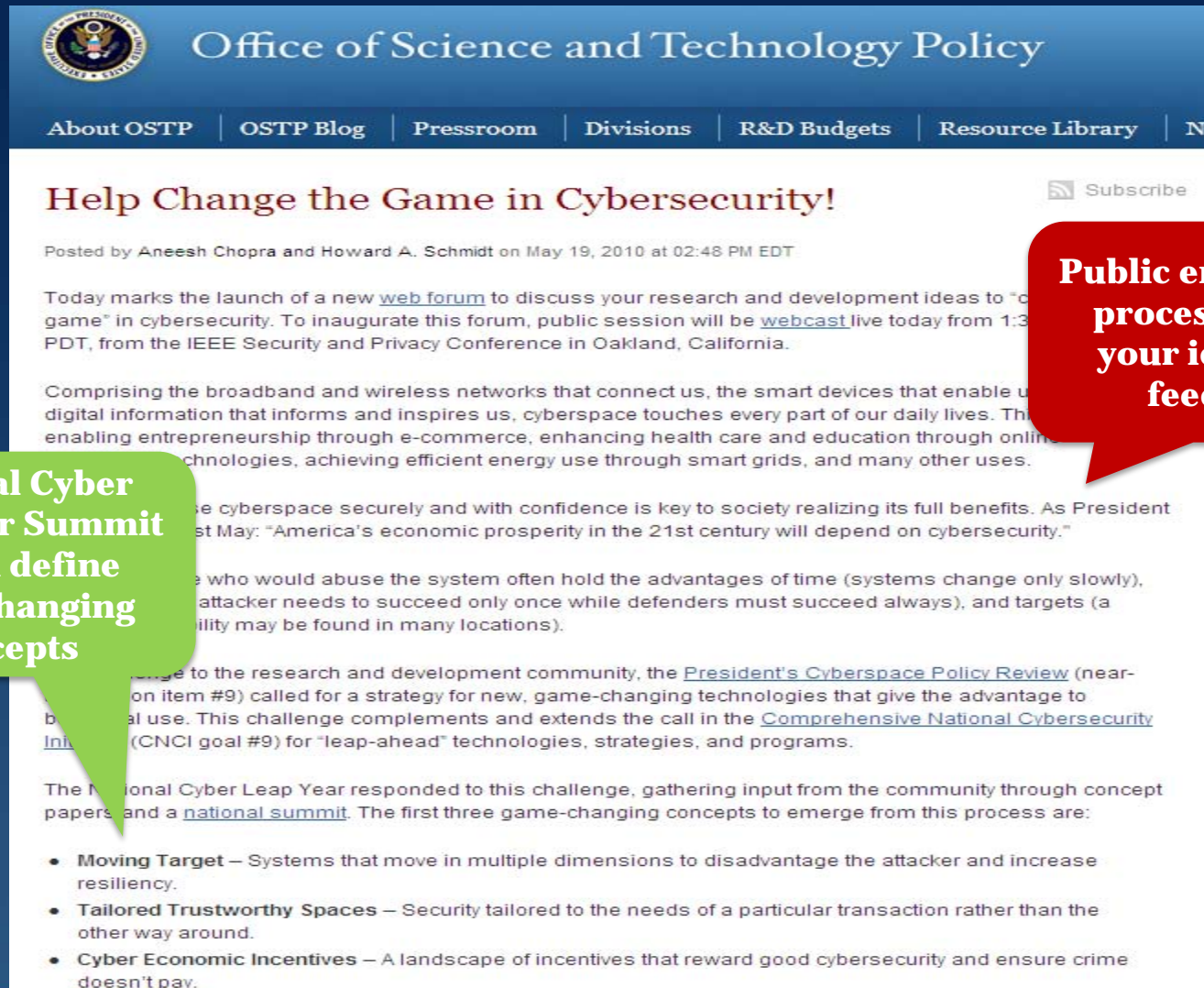
Case Western Project in Brief

- Launched in November 2009
- Case Western Reserve University collaborative includes 40+ partners, 100+ household gigabit network
- R&D effort, with private sector stakeholder support, to spur innovation in poor communities “next door”
- Program metrics and goals set to measure changes related to:
 - Neighborhood Safety
 - Health and Wellness
 - STEM Education
 - Energy Sustainability



In Pursuit of “Game Changers” in Cybersecurity

Public Input Key to Moving “Leap-Ahead” Technologies Forward



The screenshot shows the OSTP website header with the seal and navigation links. The main content area features a blog post with a green callout box on the left and a red callout box on the right. The blog post text discusses the launch of a web forum for cybersecurity ideas, the importance of cyberspace, and the role of the National Cyber Leap Year Summit in defining game-changing concepts.

Office of Science and Technology Policy

About OSTP | OSTP Blog | Pressroom | Divisions | R&D Budgets | Resource Library | NS

Help Change the Game in Cybersecurity!

Posted by Aneesh Chopra and Howard A. Schmidt on May 19, 2010 at 02:48 PM EDT

Today marks the launch of a new [web forum](#) to discuss your research and development ideas to “change the game” in cybersecurity. To inaugurate this forum, public session will be [webcast](#) live today from 1:30-3:30 PDT, from the IEEE Security and Privacy Conference in Oakland, California.

Comprising the broadband and wireless networks that connect us, the smart devices that enable us to use digital information that informs and inspires us, cyberspace touches every part of our daily lives. This enabling entrepreneurship through e-commerce, enhancing health care and education through online learning, achieving efficient energy use through smart grids, and many other uses.

Ensuring cyberspace securely and with confidence is key to society realizing its full benefits. As President Obama said last May: “America’s economic prosperity in the 21st century will depend on cybersecurity.”

Those who would abuse the system often hold the advantages of time (systems change only slowly), the attacker needs to succeed only once while defenders must succeed always), and targets (a vulnerability may be found in many locations).

To respond to the research and development community, the [President’s Cyberspace Policy Review](#) (near-final report item #9) called for a strategy for new, game-changing technologies that give the advantage to the defender. This challenge complements and extends the call in the [Comprehensive National Cybersecurity Initiative](#) (CNCI goal #9) for “leap-ahead” technologies, strategies, and programs.

The National Cyber Leap Year responded to this challenge, gathering input from the community through concept papers and a [national summit](#). The first three game-changing concepts to emerge from this process are:

- **Moving Target** – Systems that move in multiple dimensions to disadvantage the attacker and increase resiliency.
- **Tailored Trustworthy Spaces** – Security tailored to the needs of a particular transaction rather than the other way around.
- **Cyber Economic Incentives** – A landscape of incentives that reward good cybersecurity and ensure crime doesn’t pay.

National Cyber Leap Year Summit helped define game-changing concepts

Public engagement process invited your ideas and feedback

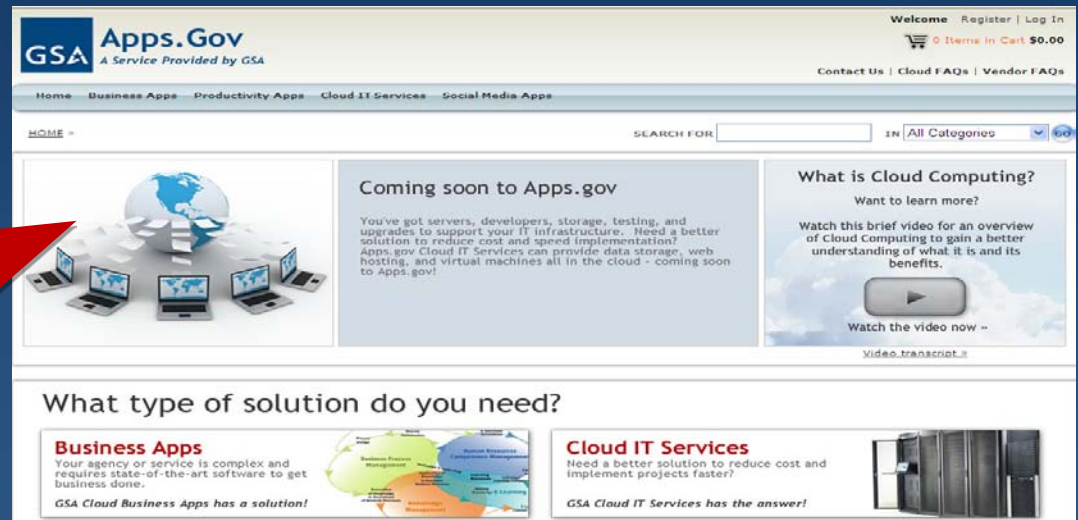
From R&D to Public Sector Innovation

Cloud + Mobility an Opportunity for Economic Growth, Efficiency



\$15+M in NSF research awards supporting cloud partnerships with Google, Microsoft, Yahoo, IBM, HP, Intel

Innovations: Dramatically lower storage costs; bandwidth; and processing power enable game-changing apps

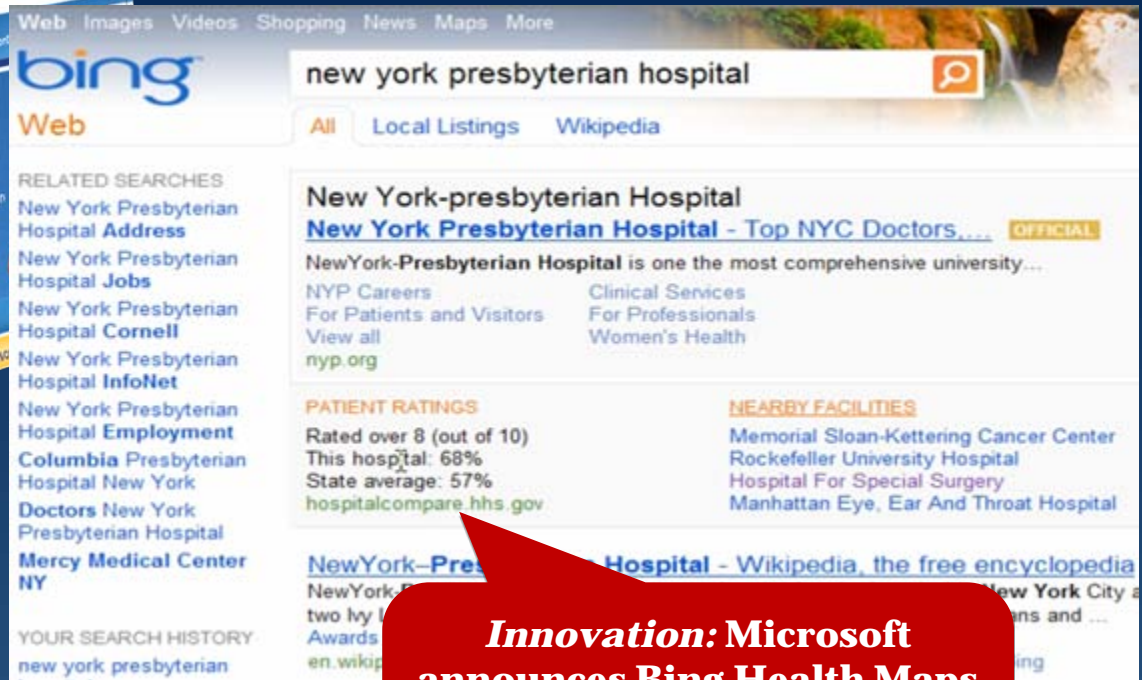


Anatomy of an Open Government Ecosystem

HHS Launches Community Health Data Initiative (CHDI)



HHS launches CHDI June 2nd - demonstrating 20+ apps recently built or improved by innovators across the country using data HHS has made public (with much more to come)



Innovation: Microsoft announces Bing Health Maps and the incorporation of "Hospital Compare" data in search results



Helping Our Children Make Healthier Choices

Prizes Policy Spurs USDA to Reward Apps Developers



The screenshot shows the homepage of the 'Apps for Healthy Kids' website. At the top, there's a navigation bar with 'FAQ | Login | Register' and a 'FOLLOW US ON twitter' button. The main header features the 'APPS FOR HEALTHY KIDS' logo and a 'LET'S MOVE! USDA' logo. Below the header, there are tabs for 'Home', 'Application Gallery', 'Submit Application', 'Resources', and 'Partners'. The main content area has a green banner for the 'Let's Move! for the Apps for Healthy Kids competition' with a \$60,000 prize pool. To the right, a 'CHALLENGE SUPPORTERS' section shows 40,059 total supporters, with 31,683 adults and 8,376 kids. A 'Promote this challenge' section at the bottom includes social media links and a 'Recent Supporters' list.

95 qualified apps built on data that feeds USDA site – judges include Zynga's CEO, "Woz", GE's Healthymagination lead



Sample App: Smash Your Food™ lets children see foods explode - while learning how much sugar, salt and oil are in them

“The Apps for Healthy Kids competition challenges... the most creative, talented, and kid-savvy innovators across the country to build games that inspire and empower kids to get active and eat healthy.” —First Lady Michelle Obama, March 11th, 2010

“All Hands” - Health 2.0 Developer Challenge



**A growing number of
“challenges” leading up to
Health IT Innovation Week –
October 3-10th, 2010**

Featured Challenges



**WWHI catalyzes innovation -
\$10K for a personalized
wireless health ecosystem;
sponsors “Innovation Day” –
highlighting Veterans
Healthcare (VAi2) – 10/12/10**

MARKLE

Accelerating Wireless Health Adoption

Challenger: West Wireless Health Institute

Create an application that will integrate sensor-derived data with social networks to construct a personalized wireless health ecosystem.

Blue Button Challenge

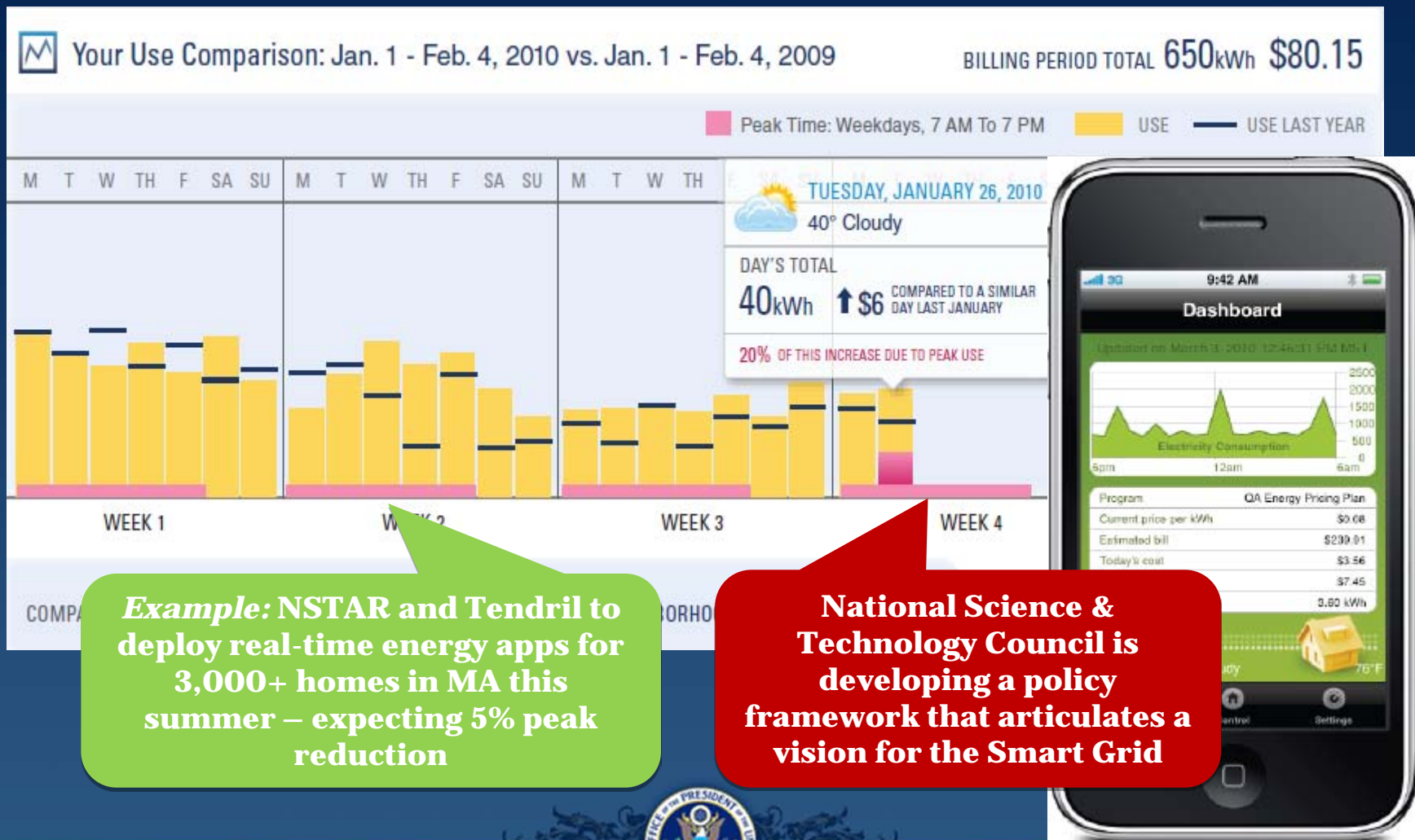
Challenger: Markle Foundation and RWJF

Develop a web-based tool that uses sample data from CMS or VA to help patients stay healthy and manage their care.



The Smart Grid Opportunity

Recovery Act Leveraged to Support 100 Projects Valued at \$10+BN



A Commitment to Drive Innovation in Health IT

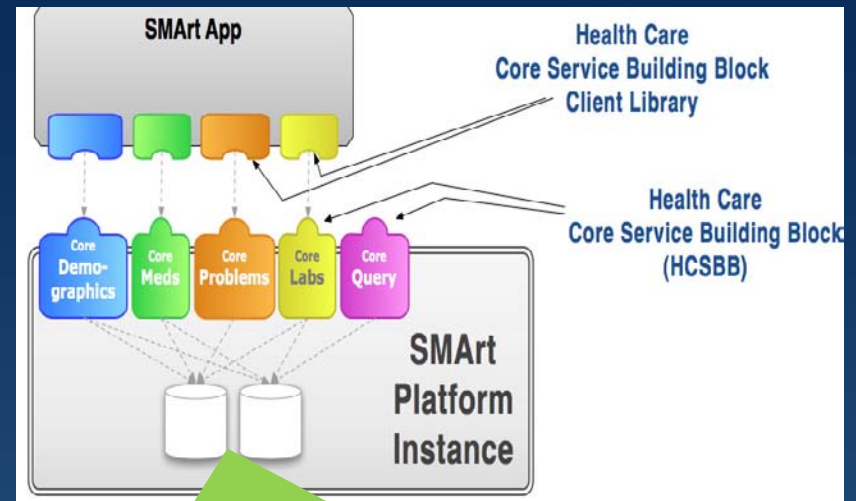
Open Collaborations to Catalyze Breakthroughs in Apps, Exchange

NHIN Direct Project in Brief



“A set of policies, standards and services that enable the Internet to be used for secure and meaningful exchange of health information to improve health and health care” – Tech Specs by June, Implementations by October, 2010

SHARP Grantee - SMArt Apps



Harvard researchers focused on health platforms (like Indivo) to support substitutable apps – prototypes by 2011; aligned with “modular” certification for “meaningful use”



Putting it Altogether: Entrepreneurs are Welcome

Bob, Dave, Andrew Embody Spirit of (Near) Frictionless Participation



APPS FOR INNOVATION DEVELOPER CONTEST

The contest asked developers to build apps that demonstrate one of two categories: how innovation and entrepreneurship are impacting the U.S. economy or apps that help consumers advance policy goals that support innovation. The contest was open to apps for any type of device or any Web platform.

Jump to
Select an App



GOVPULSE

WINNER

INNOVATION

MOVEMENT NETWORK

ONLINE TOWNHALLS

3rd PLACE

Team (in spare time) wins competition (Jan, '10) by building more accessible Federal Register after posted on data.gov



Inspires AOTUS (March, '10) to designate team as lead designers for modernized "daily newspaper of the federal government"

